UNITED STATES NAVAL OBSERVATORY

CIRCULAR NO. 3

U. S. Naval Observatory, Washington 25, D. C. November 15, 1949

POSITIONS, AREAS, AND COUNTS OF SUNSPOTS

JANUARY - APRIL, 1948

By Lucy T. Day

All measurements and spot counts were made at the Naval Observatory from plates secured either in Washington, or at Mt. Wilson. Difference in longitude is measured from the central meridian, positive toward the west; latitude is positive toward the north. Areas are corrected for foreshortening and expressed in millionths of the sun's hemisphere. For each date at the bottom of the columns headed: Mt. Wilson group number, difference in longitude, latitude, area of spot or group, and spot count are included respectively: number of groups, assumed longitude of the central meridian, assumed latitude of the center of the disk, total area of spots and groups, and total spot count. The date is expressed in Universal Time. The observatory at which the plate was secured and its quality are indicated directly below this date. (NO stands for U. S. Naval Observatory, MW for Mt. Wilson Observatory; and the symbols VG, G, F and P mean very good, good, fair and poor respectively.) Spots not assigned a number at Mt. Wilson are indicated by an asterisk. Corresponding data were published in the Monthly Weather Review from February 1927 to December 1947. Since December 31, 1947 they are published monthly in this series of circulars.

Date U.T. Jan.	Mount Wilson group No.	Heliographic Difference in longitude °	Heliographic Latitude °	Distance from center of disk °	Area of spot or group	Spot count
1.796	9006	−68	+27	71	24	2
MW-G	9005	−65	−10	65	24	5
	9002	−57	+ 5	58	61	3
	9001	−55	− 7	55	73	1
	(*)	−23	−28	33	12	5
	9000	−12	+14	21	194	29
	8998	+11	−19	19	97	13
	8998	+19	−19	24	291	14
	9003	+24	+26	37	242	20
	8996	+24	−15	27	291	1
	8996	+28	−17	33	121	15
	8997	+30	+10	33	97	24
	8995	+35	−13	35	61	18
	8994	+49	−23	52	97	7
	8994	+59	−23	61	436	11
	9004	+54	+15	57	36	5
	(13)	(122)	(−3)		2,157	173
2.727	(*)	−85	−19	85	24	4
MW-G	9006	−54	+28	61	12	4
	9006	−52	+27	59	12	5
	9005	−53	−11	54	48	13
	9002	−45	+ 5	46	61	1
	9001	−42	− 7	42	61	2
	9000	+ 1	+14	17	242	27
	8998	+25	−19	29	97	10
	8998	+32	−19	35	242	4
	9003	+33	+27	44	73	6
	9003	+39	+26	46	121	15
	8996	+37	−15	39	303	1
	8996	+42	−16	44	121	6
	8997	+43	+11	44	242	18
	8995	+48	−13	49	61	13
	8994	+63	−23	65	121	6
	8994	+71	−23	72	412	1
	9004	+67	+16	69	145	7
	(13)	(110)	(−3)		2,398	143
3.656	9007	−88	−17	88	291	1
NO-G	9006	−40	+28	48	121	5
	9002	−33	+ 6	34	12	3
	9002	−30	+ 6	32	48	1
	9001	−27	− 7	28	48	3
	(*)	−20	+12	25	12	3
	(*)	− 5	+ 1	6	6	2
	(*)	0	−10	7	12	6
	9000	+12	+14	21	97	11
	9000	+15	+15	23	267	18
	8998	+37	−19	41	73	7
	8998	+44	−19	46	242	1
	9003	+50	+27	58	194	10
	8996	+50	−15	51	339	7
	8997	+57	+11	59	291	13
	8995	+61	−13	62	61	10
	8994	+74	−23	75	48	3
	8994	+85	−23	85	582	1
	9004	+80	−17	80	242	3
	(15)	(98)	(−3)		2,986	108
4.737	9010	−82	−32	82	97	3
MW-F	9007	−74	−17	74	388	1
	9009	−32	− 8	33	24	3
	9006	−27	+27	40	97	14
	9002	−17	+ 6	20	24	2
	9001	−14	− 7	14	24	4
	9008	−12	+14	20	12	2
	9000	+28	+14	32	291	20
	8998	+49	−19	51	36	1
	8998	+58	−19	60	218	2
	9003	+64	+26	69	145	11
	8996	+64	−15	66	291	6
	8997	+71	+11	71	291	2
	8995	+75	−12	75	97	3
	(13)	(83)	(−3)		2,035	74
5.722	9011	−78	+18	78	24	4
NO-F	9011	−75	+15	75	12	1
	9010	−75	−31	75	97	1
	9010	−70	−30	71	194	1
	9007	−60	−17	62	291	1
	9006	−13	+27	33	97	5
	9002	− 3	+ 6	9	24	1
	9008	+ 3	+14	17	121	3
	9000	+43	+14	45	170	6
	8998	+61	−19	64	73	2
	8998	+71	−19	71	242	1
	8996	+78	−15	78	242	1
	(9)	(70)	(−3)		1,587	27
6.658	9011	−65	+16	68	24	3
MW-VG	9010	−61	−32	63	194	7
	9010	−55	−30	60	170	6
	9007	−45	−18	48	267	2
	9013	−34	−14	36	6	1
	9006	− 2	+26	30	12	6
	9006	+ 3	+25	29	16	2
	9012	+ 2	+12	16	12	3
	9005	+ 3	− 8	6	73	9
	9002	+10	+ 6	14	16	1
	9008	+13	+15	23	48	9
	9008	+18	+13	25	145	3
	9000	+56	+14	59	121	9
	8998	+85	−19	85	242	1
	(11)	(58)	(−4)		1,346	62
7.698	9015	−80	−14	80	121	3
NO-G	9015	−77	−13	77	48	1
	9011	−57	+17	60	12	3
	9011	−51	+16	54	24	4
	9010	−50	−32	55	194	1
	9010	−43	−31	49	97	7
	9014	−40	+14	44	6	1
	9014	−37	+13	41	24	1
	9007	−36	−17	38	24	2
	9007	−33	−18	35	291	1
	9006	+11	+29	34	12	4
	9006	+17	+25	33	6	1
	9005	+15	− 9	15	24	11
	9005	+19	− 8	19	12	1
	9002	+25	+ 6	26	12	1
	9008	+25	+15	31	12	1
	9008	+28	+13	33	24	9
	9008	+31	+13	36	97	2

Date U.T. Jan.	Mount Wilson group No.	Heliographic Difference in longitude °	Heliographic Latitude °	Distance from center of disk °	Area of spot or group	Spot count
	9000	+70	+13	72	48	2
	(10)	(44)	(−4)		1,088	56
8.650	9015	−68	−14	68	97	5
MW-F	9015	−62	−13	62	145	2
	9016	−52	+ 9	54	12	1
	9010	−38	−32	45	121	1
	9010	−33	−31	42	145	12
	9011	−36	+16	41	24	3
	9014	−24	+11	28	61	2
	9007	−22	−18	25	24	2
	9007	−19	−19	23	291	1
	9013	+ 1	−11	7	24	3
	9006	+29	+26	41	12	3
	9005	+32	− 8	32	24	4
	9008	+38	+15	42	12	1
	9008	+42	+14	45	145	7
	(10)	(32)	(−4)		1,137	47
9.729	9015	−56	−15	58	97	7
NO-G	9015	−49	−14	50	121	2
	9016	−40	+10	43	12	1
	9010	−27	−33	39	121	2
	9010	−20	−32	34	170	14
	9011	−20	+15	26	24	6
	9014	−10	+12	19	48	2
	9007	− 7	−19	17	339	2
	9013	+10	−12	13	6	2
	9013	+15	−10	15	48	4
	(*)	+28	− 8	29	12	3
	9006	+41	+26	49	48	3
	9005	+48	− 8	48	24	2
	9017	+57	−20	58	12	4
	9008	+57	+15	60	73	2
	(12)	(18)	(−4)		1,155	56
10.659	9015	−43	−15	45	73	17
MW-F	9015	−36	−14	37	97	6
	9010	−14	−33	32	97	2
	9010	− 7	−32	29	145	15
	9011	− 7	+14	19	24	3
	9014	+ 3	+12	15	48	4
	9007	+ 6	−19	16	291	1
	9013	+29	−10	30	61	5
	9006	+55	+25	61	24	6
	9005	+60	− 8	60	24	2
	9008	+69	+15	71	36	2
	9017	+70	−20	70	48	6
	(10)	(5)	(−4)		968	69
11.670	9015	−29	−15	31	97	19
MW-G	9015	−23	−14	26	97	8
	9019	−23	− 8	24	36	6
	9010	0	−33	29	61	6
	9010	+ 5	−32	28	97	25
	9011	+ 7	+15	21	16	6
	9014	+17	+11	23	24	4
	9007	+19	−19	24	267	1
	9013	+41	−10	41	24	5
	9006	+67	+25	70	24	3

Date U.T. Jan.	Mount Wilson group No.	Heliographic Difference in longitude °	Heliographic Latitude °	Distance from center of disk °	Area of spot or group	Spot count
	9017	+81	−19	81	24	4
	(9)	(352)	(−4)		767	87
12.743	9024	−78	−12	78	97	2
MW-F	9022	−75	+19	77	194	1
	9015	−14	−16	18	73	15
	9015	− 9	−15	14	97	8
	9019	− 9	− 7	11	36	9
	9010	+13	−33	31	48	6
	9010	+19	−32	34	48	17
	9007	+32	−19	35	242	1
	9007	+36	−18	39	48	16
	9013	+55	−10	55	24	2
	(7)	(338)	(−4)		907	77
13.717	9024	−65	−13	65	97	4
MW-P	9022	−61	+19	65	194	1
	9021	−56	−10	56	48	1
	9015	− 1	−16	12	36	5
	9015	+ 5	−15	12	24	1
	9019	+ 4	− 7	6	48	3
	9025	+34	−15	35	24	5
	9007	+45	−19	47	242	1
	9007	+50	−18	51	6	1
	(7)	(325)	(−4)		719	22
14.681	9028	−78	+12	78	48	2
NO-F	9027	−73	+19	76	97	7
	9026	−72	−24	72	145	1
	9023	−55	− 3	55	121	3
	9022	−49	+19	54	194	1
	9021	−42	−11	42	36	3
	9021	−40	−10	40	48	1
	9015	+10	−17	17	36	1
	9019	+19	− 8	20	121	6
	9007	+59	−19	60	267	1
	(9)	(312)	(−4)		1,113	26
15.698	9028	−64	+12	66	73	2
NO-F	9027	−60	+18	64	145	7
	9026	−59	−24	60	145	2
	9023	−43	− 3	43	97	2
	9023	−38	− 2	38	97	1
	9024	−37	−13	38	61	1
	9022	−35	+19	43	194	1
	9021	−28	−10	28	12	1
	9019	+30	− 8	30	48	1
	9019	+33	− 8	33	97	5
	9029	+35	−34	44	6	2
	9007	+71	−19	72	267	1
	(10)	(299)	(−5)		1,242	26
16.637	9028	−50	+12	52	121	2
NO-F	9027	−49	+17	53	24	2
	9027	−43	+17	49	61	3
	9026	−48	−24	51	121	5
	9026	−42	−21	44	61	1
	9030	−35	−13	36	48	2
	9023	−30	− 3	30	73	2
	9023	−25	− 1	26	97	1

Date U.T. Jan.	Mount Wilson group No.	Heliographic Difference in longitude °	Heliographic Latitude °	Distance from center of disk °	Area of spot or group	Spot count
	9024	−23	−13	25	48	2
	9022	−22	+19	32	194	1
	9019	+43	− 8	43	121	6
	9019	+47	− 8	47	97	3
	9007	+85	−19	85	194	1
	(9)	(287)	(−5)		1,260	31
17.671	9028	−36	+12	40	12	2
MW-VG	9026	−35	−25	40	73	7
	9026	−28	−22	32	48	3
	9027	−32	+17	39	16	4
	9030	−22	−13	23	36	14
	9023	−16	− 3	16	48	13
	9023	−12	− 2	13	48	9
	9024	−10	−13	13	24	5
	9022	− 9	+19	25	194	1
	9019	+57	− 7	57	109	14
	9019	+61	− 8	61	158	6
	(8)	(273)	(−5)		766	78
18.666	9034	−87	−22	87	194	1
MW-G	9033	−66	+23	70	6	1
	9032	−52	−11	53	6	2
	9026	−22	−25	28	48	5
	9026	−15	−22	22	24	10
	9028	−22	+13	28	6	1
	9027	−18	+19	30	24	7
	9031	−15	−36	33	12	5
	9030	− 8	−12	11	36	9
	9023	− 3	− 3	3	24	5
	9023	+ 2	− 3	2	36	3
	9024	+ 4	−13	9	48	6
	9022	+ 5	+19	24	194	1
	9019	+71	− 8	71	121	4
	9019	+75	− 8	75	194	6
	(12)	(260)	(−5)		973	66
19.685	9034	−74	−25	75	48	2
NO-F	9034	−73	−23	74	242	1
	9033	−53	+23	59	12	1
	9026	− 9	−25	23	48	1
	9031	0	−36	31	24	2
	9030	+ 6	−12	8	194	10
	9023	+16	− 3	17	24	1
	9024	+17	−13	19	61	1
	9022	+19	+19	31	194	1
	(8)	(247)	(−5)		847	20
20.661	9037	−80	−13	80	291	1
NO-F	9036	−79	− 7	79	36	1
	9034	−64	−27	66	97	1
	9034	−60	−23	61	291	1
	9034	−59	−27	60	24	1
	9026	+ 3	−25	20	48	1
	9030	+18	−11	20	170	8
	9030	+21	−11	22	206	1
	9024	+30	−13	31	12	1
	9022	+31	+19	39	194	1
	(7)	(234)	(−5)		1,369	17

Date U.T. Jan.	Mount Wilson group No.	Heliographic Difference in longitude °	Heliographic Latitude °	Distance from center of disk °	Area of spot or group	Spot count
21.649	9038	−78	−19	79	194	1
NO-G	9037	−66	−14	66	339	1
	9037	−59	−12	59	6	1
	9036	−66	− 7	66	170	5
	9034	−50	−28	53	61	1
	9034	−48	−24	51	339	1
	9034	−45	−26	48	24	1
	9028	+16	+15	26	36	4
	(*)	+16	+ 5	20	24	2
	9026	+16	−25	25	48	2
	9030	+31	−11	32	194	13
	9030	+35	−11	36	291	1
	9031	+32	−36	44	24	4
	9022	+44	+19	50	194	1
	(10)	(221)	(−5)		1,944	38
22.646	9038	−65	−19	65	194	1
NO-G	9036	−55	− 7	55	121	7
	9036	−50	− 7	50	194	1
	9037	−53	−13	54	12	2
	9037	−52	−13	53	339	1
	9034	−37	−28	42	48	1
	9034	−36	−24	40	267	1
	9034	−36	−25	41	61	9
	9033	−12	+23	30	97	8
	9026	+30	−25	35	12	1
	9030	+43	−11	44	158	8
	9030	+48	−11	49	315	1
	9022	+57	+19	61	194	1
	(8)	(208)	(−5)		2,012	42
23.688	9040	−51	−16	53	36	6
MW-G	9038	−51	−19	53	206	1
	9036	−42	− 7	42	97	13
	9036	−37	− 7	37	170	1
	9037	−42	−13	43	48	9
	9037	−37	−13	38	291	4
	9034	−24	−27	32	36	9
	9034	−24	−24	30	230	1
	9033	+ 2	+22	26	48	8
	9030	+57	−13	58	97	15
	9030	+62	−12	62	339	2
	9039	+58	− 1	58	12	1
	9022	+70	+18	74	194	1
	(9)	(194)	(−5)		1,804	71
24.681	9042	−52	− 9	52	12	2
MW-VG	9038	−42	−19	44	12	3
	9038	−38	−19	41	145	1
	9040	−37	−16	39	73	15
	9036	−30	− 7	30	48	7
	9036	−23	− 7	23	145	1
	9037	−30	−12	31	24	4
	9037	−24	−13	26	339	8
	9034	−11	−26	24	6	2
	9034	−10	−24	22	242	1
	9033	+16	+22	30	73	12
	9041	+39	−20	41	12	7
	9030	+75	−12	76	194	1
	(9)	(181)	(−5)		1,325	64

Date U.T. Jan.	Mount Wilson group No.	Heliographic Difference in longitude °	Heliographic Latitude °	Distance from center of disk °	Area of spot or group	Spot count
25.674	9043	−72	−12	72	48	6
MW-VG	9038	−28	−19	32	24	12
	9038	−24	−19	28	145	2
	9040	−23	−16	26	73	9
	9036	−16	− 9	17	48	10
	9036	− 9	− 8	10	121	1
	9037	−16	−12	16	24	10
	9037	− 9	−13	12	388	15
	9034	+ 3	−24	20	242	1
	9033	+30	+22	40	97	27
	9041	+52	−20	54	73	10
	(8)	(168)	(−5)		1,283	103
26.644	9043	−67	−12	67	12	6
NO-G	9043	−60	−13	60	24	3
	9042	−23	− 8	23	24	4
	9038	−14	−20	19	24	6
	9038	−10	−19	17	121	1
	9040	−10	−16	14	97	6
	9036	− 3	− 8	3	36	6
	9036	+ 4	− 8	5	73	2
	9037	− 3	−12	6	97	9
	9037	+ 5	−13	9	315	1
	9034	+16	−24	23	267	1
	9044	+32	−12	32	24	1
	9033	+43	+22	52	97	7
	9041	+65	−20	66	97	5
	(10)	(155)	(−6)		1,308	58
27.760	9043	−53	−12	53	48	1
MW-P	9043	−47	−13	47	48	1
	9038	+ 4	−19	14	194	4
	9040	+ 5	−15	11	121	2
	9037	+15	−12	17	97	1
	9037	+19	−13	20	291	1
	9036	+16	− 8	16	48	1
	9034	+29	−24	33	194	1
	9045	+32	+ 9	35	24	1
	9044	+45	−13	46	48	1
	(8)	(140)	(−6)		1,113	14
28.638	9046	−65	+23	71	170	5
NO-G	9043	−36	−14	37	48	1
	(*)	− 3	+10	17	12	1
	9038	+13	−20	18	194	7
	(*)	+16	+19	31	12	2
	9037	+27	−13	28	24	1
	9037	+32	−13	32	267	1
	9036	+28	− 8	28	48	4
	9047	+33	+ 9	37	48	4
	9034	+40	−25	44	194	1
	9045	+44	+ 9	47	24	6
	(10)	(129)	(−6)		1,041	33
29.635	9046	−52	+22	60	97	7
NO-G	9043	−23	−15	24	12	1
	9043	−20	−14	22	6	7
	9038	+27	−20	30	109	15
	9036	+41	− 8	41	12	4
	9037	+41	−13	42	97	10
	9037	+46	−13	47	291	1
	9047	+47	+ 9	51	48	4
	9034	+53	−25	55	194	1
	9045	+59	+ 9	61	97	8
	9044	+75	−13	75	6	1
	(9)	(116)	(−6)		969	59
30.760	9048	−80	−15	80	291	1
MW-P	9048	−75	−14	75	97	1
	9046	−40	+23	50	12	1
	9046	−37	+23	48	36	3
	9038	+42	−20	44	121	3
	9049	+45	− 7	45	12	2
	9037	+56	−13	56	97	3
	9037	+61	−13	61	242	1
	9034	+67	−24	67	194	1
	9045	+75	+ 9	78	121	3
	(7)	(101)	(−6)		1,223	19
31.667	9051	−81	−18	81	24	1
NO-F	9048	−67	−15	67	364	3
	9048	−60	−14	60	242	4
	9046	−27	+23	40	12	1
	9038	+55	−18	56	24	1
	9037	+69	−13	69	97	2
	9037	+75	−13	75	242	1
	9034	+80	−24	80	194	1
	(6)	(89)	(−6)		1.199	14

Mean daily area for 31 days = 1,356
Mean 10 g+s for 31 days = 152.9

Feb.	9054	−78	+13	79	145	2
1.656	9051	−69	−18	69	24	1
MW-VG	9050	−69	−24	68	48	12
	9048	−54	−15	54	388	9
	9048	−46	−14	46	218	8
	9053	−35	−23	38	24	7
	9043	+15	−13	16	12	2
	9052	+68	−20	69	24	5
	9037	+83	−14	83	24	6
	(8)	(76)	(−6)		907	52
2.760	9055	−85	− 7	85	97	3
NO-F	9054	−64	+13	68	97	1
	9051	−55	−18	56	24	3
	9048	−40	−15	41	339	6
	9048	−32	−15	33	242	1
	9053	−21	−24	26	97	8
	(5)	(61)	(−6)		896	22
3.644	9055	−72	− 7	72	170	1
NO-G	9054	−50	+13	54	97	1
	9051	−41	−18	42	12	1
	9051	−37	−17	39	24	2
	9048	−27	−14	28	388	11
	9048	−19	−14	22	218	1
	9056	−21	− 6	21	36	6

Date U.T. Feb.	Mount Wilson group No.	Heliographic Difference in longitude °	Heliographic Latitude °	Distance from center of disk °	Area of spot or group	Spot count
	9053	− 9	−24	20	121	7
	(6)	(50)	(−6)		1,066	30
4.665	9055	−64	− 8	64	24	1
MW-G	9055	−57	− 8	57	170	1
	9060	−63	−12	63	24	1
	9054	−38	+13	44	97	7
	9051	−23	−17	25	36	5
	9048	−14	−14	16	364	12
	9048	− 8	−14	12	24	1
	9048	− 6	−14	11	242	1
	9058	−12	+17	26	36	7
	9053	+ 4	−24	19	121	14
	9057	+57	− 9	57	24	5
	(8)	(36)	(−6)		1,162	55
5.688	9055	−50	− 8	50	48	6
NO-F	9055	−43	− 8	43	145	1
	9060	−48	−13	48	109	7
	9054	−24	+13	31	97	6
	9048	− 8	−15	12	73	3
	9048	− 1	−14	9	315	7
	9048	+ 9	−14	12	291	1
	9058	0	+18	24	24	1
	9058	+ 4	+16	23	24	1
	9053	+18	−24	25	61	3
	(*)	+37	+ 7	40	12	1
	(*)	+62	+ 6	65	24	1
	(8)	(23)	(−6)		1,223	38
6.683	9063	−77	+15	80	48	1
NO-F	9062	−71	+10	74	121	1
	9055	−37	− 7	37	145	14
	9055	−30	− 8	30	170	1
	9060	−35	−13	35	194	15
	9054	−10	+13	23	24	5
	9048	+ 6	−16	12	97	7
	9048	+13	−14	15	145	9
	9048	+17	−15	20	24	3
	9048	+21	−15	23	242	1
	9058	+18	+16	30	24	1
	9053	+31	−23	34	24	5
	(8)	(10)	(−6)		1,258	63
8.722	9063	−46	+16	52	12	1
MW-F	9062	−42	+ 9	46	48	4
	9055	− 7	− 7	7	61	15
	9055	− 3	− 8	3	97	1
	9061	−10	+25	34	12	5
	9060	− 7	−13	11	24	13
	9060	− 2	−13	8	97	5
	9054	+19	+12	26	24	5
	9059	+23	+ 9	28	48	10
	9048	+34	−17	35	12	2
	9048	+38	−16	40	61	6
	9048	+48	−15	49	242	3
	9058	+41	+17	48	73	6
	9058	+44	+14	50	48	13
	(9)	(343)	(−6)		859	89

Date U.T. Feb.	Mount Wilson group No.	Heliographic Difference in longitude °	Heliographic Latitude °	Distance from center of disk °	Area of spot or group	Spot count
9.734	9063	−33	+16	40	6	1
MW-G	9062	−29	+ 9	33	36	1
	9055	+ 6	− 8	8	24	9
	9055	+11	− 8	11	97	1
	9060	+ 7	−13	10	97	16
	9060	+12	−13	13	73	6
	9054	+33	+12	38	48	15
	9059	+37	+ 9	41	36	4
	9059	+42	+ 9	45	12	1
	9048	+50	−15	50	12	3
	9048	+62	−16	62	206	4
	9058	+55	+17	60	218	9
	9058	+60	+15	65	194	15
	(8)	(329)	(−7)		1,059	85
10.653	9066	−80	−19	80	24	1
NO-F	9065	−75	+19	78	145	1
	9063	−20	+16	30	12	2
	9062	−16	+ 7	23	24	2
	9055	+17	− 8	17	97	8
	9055	+23	− 9	23	73	1
	9060	+20	−13	21	97	8
	9060	+26	−11	26	97	4
	9054	+46	+12	50	36	3
	9059	+50	+10	52	145	7
	9058	+66	+18	70	339	1
	9058	+73	+16	77	194	3
	9048	+74	−15	74	218	2
	(10)	(317)	(−7)		1,501	43
11.785	9066	−66	−19	66	12	1
MW-P	9065	−62	+18	65	145	3
	9062	− 2	+ 8	16	12	1
	9055	+32	− 8	32	61	5
	9055	+37	− 8	37	73	1
	9060	+35	−13	35	145	7
	9060	+41	−12	41	97	1
	9059	+65	+10	67	170	3
	9058	+80	+18	82	339	1
	(7)	(302)	(−7)		1,054	23
12.735	9065	−48	+18	54	121	2
MW-P	9067	− 6	−26	21	24	1
	9062	+13	+ 7	20	12	1
	9055	+43	− 8	43	48	4
	9055	+50	− 8	50	73	1
	9060	+46	−13	46	73	1
	9060	+53	−12	53	242	3
	9059	+76	+ 9	77	145	1
	(6)	(290)	(−7)		738	14
13.673	9065	−35	+18	43	48	2
MW-G	9055	+57	− 8	57	48	4
	9055	+63	− 8	63	73	1
	9060	+60	−13	60	97	5
	9060	+65	−12	65	242	6
	(3)	(278)	(−7)		508	18
14.706	9073	−77	+ 9	78	242	1
NO-P	9071	−28	−18	30	12	1

Date U.T. Feb.	Mount Wilson group No.	Heliographic Difference in longitude °	Heliographic Latitude °	Distance from center of disk °	Area of spot or group	Spot count
	9055	+75	− 7	75	145	3
	9060	+75	−14	75	194	1
	9060	+82	−12	82	242	3
	(4)	(264)	(−7)		835	9
15.850	9075	−82	−11	82	242	1
N O-F	9073	−62	+ 9	64	218	1
	9072	−25	−12	25	242	11
	9065	− 8	+19	28	24	2
	9074	− 6	+24	32	48	3
	9070	+10	− 3	11	36	2
	9068	+18	−19	22	48	5
	(7)	(249)	(−7)		858	25
16.716	9075	−70	−12	70	194	1
N O-P	9073	−49	+ 9	51	194	1
	9072	−13	−13	13	218	9
	9070	+23	− 3	24	97	3
	9068	+30	−19	32	61	4
	(5)	(237)	(−7)		764	18
17.670	9077	−83	−15	83	48	1
N O-G	9076	−81	− 8	81	109	1
	9075	−57	−12	57	194	1
	9073	−36	+ 9	40	194	1
	9072	− 3	− 6	3	12	5
	9072	− 5	−12	7	145	11
	9072	+ 1	−12	5	194	10
	9074	+18	+24	36	16	4
	9070	+36	− 3	37	145	7
	9068	+42	−19	42	12	3
	(8)	(225)	(−7)		1,069	44
18.628	9077	−69	−13	69	48	2
N O-G	9076	−69	− 7	69	97	1
	9076	−61	−10	61	24	3
	9075	−45	−12	45	145	2
	9075	−41	−10	41	12	1
	9073	−24	+10	30	194	1
	9072	+ 9	−11	10	194	8
	9072	+12	−11	12	194	1
	9074	+30	+24	42	170	10
	9074	+35	+25	47	194	1
	9070	+49	− 3	49	109	4
	(7)	(212)	(−7)		1,381	34
19.682	9079	−59	+20	63	12	2
N O-VG	9077	−56	−13	56	24	2
	9076	−54	− 7	54	61	1
	9075	−32	−12	32	121	2
	9075	−28	−10	28	16	1
	9073	−11	+10	21	194	1
	9072	+22	−12	22	194	9
	9072	+26	−11	26	194	6
	9078	+30	+26	44	12	5
	9074	+45	+24	54	582	22
	9070	+63	− 3	63	48	8
	(9)	(198)	(−7)		1,458	59
20.667	9079	−45	+19	52	121	7
N O-F	9076	−40	− 7	40	61	1
	9077	−38	−13	38	12	1
	9075	−18	−12	19	97	3
	9075	−14	−11	15	12	1
	9073	+ 2	+10	17	170	1
	9081	+24	−25	30	36	2
	9072	+36	−12	36	194	7
	9072	+40	−11	40	194	5
	9078	+44	+26	55	73	3
	9074	+57	+25	64	970	11
	9074	+65	+24	70	436	1
	9070	+75	− 3	75	48	6
	(10)	(185)	(−7)		2,424	49
21.633	9079	−33	+22	43	97	3
N O-F	9079	−29	+19	39	48	3
	9076	−27	− 7	27	61	1
	9075	− 5	−13	7	97	3
	9082	− 1	+22	29	73	2
	9073	+15	+10	23	170	1
	9081	+37	−25	40	24	3
	9072	+49	−12	49	194	5
	9072	+52	−11	52	145	2
	9078	+59	+25	65	24	3
	9074	+70	+25	76	970	3
	9074	+78	+24	79	388	1
	(9)	(173)	(−7)		2,291	30
22.691	9084	−86	− 8	86	194	1
M W-F	9079	−16	+21	32	6	2
	9076	−14	− 7	14	36	1
	9075	+ 8	−13	11	73	9
	9082	+12	+22	31	61	7
	9073	+29	+10	34	145	1
	9083	+48	−15	48	61	2
	9081	+49	−26	50	16	4
	9072	+65	−12	65	339	13
	9074	+83	+25	85	533	4
	(10)	(159)	(−7)		1,464	44
23.674	9084	−74	−12	74	145	1
N O-F	9084	−72	− 8	72	194	1
	9076	− 1	− 7	3	36	1
	9075	+22	−13	22	48	4
	9082	+24	+22	37	24	3
	9073	+42	+ 9	45	145	1
	9081	+61	−26	63	24	4
	9083	+61	−15	61	73	4
	9072	+79	−11	79	339	8
	(8)	(146)	(−7)		1,028	27
24.636	9084	−60	− 9	60	206	2
N O-G	9079	+ 6	+21	29	73	10
	9076	+12	− 7	12	36	1
	9075	+35	−12	35	48	4
	9082	+36	+22	46	12	1
	9073	+55	+10	57	145	1
	9083	+77	−16	77	12	1
	(7)	(133)	(−7)		532	20

Date U.T. Feb.	Mount Wilson group No.	Heliographic Difference in longitude °	Heliographic Latitude °	Distance from center of disk °	Area of spot or group	Spot count
25.682	9086	−86	+17	87	339	1
N O-G	9085	−57	−23	58	48	7
	9084	−46	− 9	46	194	3
	9079	+19	+21	34	170	13
	9076	+25	− 7	25	36	1
	9075	+47	−13	47	24	4
	9073	+69	+10	70	145	1
	(7)	(119)	(−7)		956	30
26.765	9086	−80	+16	82	12	1
N O-VG	9086	−70	+16	72	339	2
	9088	−76	−15	76	194	1
	9087	−47	+11	50	12	2
	9085	−43	−23	45	48	4
	9084	−31	− 9	31	170	1
	9079	+33	+21	42	48	7
	9076	+39	− 7	39	24	1
	9075	+61	−12	61	48	1
	9073	+84	+10	85	145	1
	(9)	(105)	(−7)		1,040	21
27.651	9089	−74	+18	77	48	1
N O-G	9086	−66	+17	70	48	1
	9086	−58	+17	61	776	1
	9088	−64	−15	64	194	1
	9085	−31	−23	34	36	6
	9084	−21	−11	21	48	4
	9084	−20	− 9	20	145	1
	9075	+74	−12	74	24	1
	(6)	(94)	(−7)		1,319	16
28.644	9091	−71	− 6	71	24	1
N O-VG	9091	−60	−24	61	24	1
	9089	−60	+18	64	145	2
	9086	−52	+16	56	48	2
	9086	−44	+16	49	970	7
	9088	−50	−15	50	194	1
	9085	−18	−23	24	97	15
	(*)	−15	− 9	15	48	4
	(*)	−14	+13	25	12	5
	9084	− 7	−11	9	73	8
	9084	− 6	− 9	6	97	4
	(8)	(80)	(−7)		1,732	50
29.740	9091	−57	− 6	57	24	2
N O-G	9089	−47	+18	54	145	2
	9090	−47	−24	49	24	1
	9088	−36	−15	37	145	1
	9086	−36	+17	43	48	6
	9086	−32	+17	40	873	1
	9087	− 8	+15	24	24	2
	9085	− 7	−22	17	121	8
	9084	+ 6	−11	6	48	6
	9084	+ 8	− 8	9	48	1
	(8)	(66)	(−7)		1,500	30

Mean daily area for 28 days = 1,174
Mean 10 g+s for 28 days = 111.4

Date U.T.	Mount Wilson group No.	Heliographic Difference in longitude °	Heliographic Latitude °	Distance from center of disk °	Area of spot or group	Spot count
March	9091	−44	− 5	44	24	2
1.672	9089	−34	+17	42	145	10
N O-G	9090	−33	−23	36	36	3
	9088	−23	−16	25	145	1
	9086	−19	+17	31	921	6
	(*)	− 7	+13	21	24	5
	9085	+ 7	−22	17	145	9
	9084	+20	−11	21	61	11
	9084	+21	− 7	21	12	1
	(8)	(54)	(−7)		1,513	48
2.756	9091	−29	− 4	29	12	1
M W-G	9089	−20	+18	32	48	1
	9089	−16	+17	30	97	10
	9090	−19	−23	24	48	4
	9088	− 8	−16	12	145	1
	9086	− 4	+17	25	970	18
	9094	+ 2	+11	19	48	2
	9087	+13	+13	24	12	1
	9085	+21	−22	25	194	8
	9084	+35	−11	35	36	4
	9084	+36	− 7	36	12	1
	(9)	(39)	(−7)		1,622	51
3.662	9090	−10	−26	22	12	2
N O-F	9090	− 6	−23	18	24	1
	9089	− 8	+18	27	48	1
	9089	− 7	+16	25	61	6
	9086	+ 1	+16	24	12	2
	9086	+ 8	+17	27	921	6
	9088	+ 4	−15	9	145	1
	9094	+16	+11	25	24	2
	9085	+30	−22	32	73	1
	9085	+38	−22	40	97	1
	9092	+41	+13	45	61	1
	9084	+49	−11	49	24	1
	(8)	(27)	(−7)		1,502	25
4.710	9095	−25	−18	26	12	1
N O-F	9095	−21	−17	23	24	4
	9095	−17	−18	21	12	1
	9090	+ 3	−26	20	24	2
	9089	+ 7	+17	26	97	3
	9089	+10	+18	27	12	1
	9088	+18	−16	21	121	1
	9086	+23	+17	33	776	1
	9085	+43	−22	44	48	3
	9085	+51	−22	52	48	5
	9092	+54	+12	57	145	7
	(7)	(14)	(−7)		1,319	29
5.671	9097	− 7	−14	11	12	3
M W-F	9095	− 2	−17	10	24	6
	9096	− 2	+11	18	24	2
	9089	+23	+17	33	12	2
	9088	+30	−14	31	97	1
	9086	+37	+17	44	824	10
	9085	+57	−22	58	24	1
	9085	+67	−22	67	97	1

Date U.T. Mar.	Mount Wilson group No.	Heliographic Difference in longitude °	Heliographic Latitude °	Distance from center of disk °	Area of spot or group	Spot count
	9092	+70	+12	72	12	1
	(8)	(1)	(–7)		1,126	27
6.666	9099	–67	–11	67	48	6
MW-G	9098	– 9	– 7	9	12	2
	9096	+11	+11	21	12	1
	9095	+13	–16	16	73	11
	9089	+36	+16	43	12	3
	9088	+43	–15	43	121	10
	9086	+49	+20	54	24	6
	9086	+50	+17	56	824	8
	9086	+55	+13	58	36	6
	9085	+70	–22	71	24	2
	9085	+77	–25	78	12	1
	9085	+79	–23	79	97	2
	(8)	(348)	(–7)		1,295	58
7.840	9099	–50	–11	50	73	3
NO-F	9100	– 9	+ 6	17	12	3
	9097	+17	–12	18	24	7
	9095	+28	–16	30	73	2
	9089	+50	+16	55	6	1
	9088	+59	–16	59	61	1
	9086	+61	+17	65	170	1
	9086	+65	+16	69	582	1
	9086	+70	+13	73	12	1
	(7)	(332)	(–7)		1,013	20
8.696	9102	–83	–20	83	291	1
NO-F	9101	–78	+23	80	339	2
	9099	–38	–11	38	48	6
	9100	+ 3	+ 6	14	48	1
	9095	+40	–16	40	61	6
	9088	+70	–15	71	24	1
	9086	+73	+17	76	145	1
	9086	+77	+16	79	582	1
	(7)	(321)	(–7)		1,538	19
9.722	9102	–80	–18	80	145	1
MW-P	9102	–70	–19	70	291	1
	9101	–75	+25	79	388	1
	9101	–65	+24	70	315	5
	9103	–75	+ 5	77	48	1
	9100	+13	+ 7	19	73	4
	9100	+17	+ 8	24	97	1
	9095	+53	–16	53	121	4
	9088	+82	–16	82	24	1
	(6)	(308)	(–7)		1,502	19
10.767	9102	–65	–18	65	109	1
NO-VG	9102	–55	–19	55	339	1
	9101	–63	+25	70	582	13
	9101	–57	+23	63	97	11
	9101	–51	+24	58	194	1
	9101	–48	+22	56	194	1
	9103	–61	+ 5	62	48	1
	9104	–16	– 9	16	6	4
	9100	+29	+ 6	32	73	5
	9097	+58	–13	58	73	3
	9095	+67	–16	67	97	1
	(7)	(294)	(–7)		1,812	42
11.735	9106	–75	–13	76	36	2
MW-F	9102	–51	–18	51	121	2
	9102	–42	–19	43	388	6
	9101	–50	+25	58	630	14
	9101	–41	+23	50	73	10
	9101	–39	+24	50	170	1
	9101	–37	+23	48	194	1
	9103	–48	+ 5	50	12	1
	(*)	–28	+ 8	32	6	1
	9100	+43	+ 6	46	97	6
	9097	+70	–13	71	242	2
	9095	+80	–15	80	97	1
	(8)	(281)	(–7)		2,066	47
12.620	9106	–62	–13	62	97	4
NO-F	9107	–45	–17	46	73	6
	9107	–39	–17	40	48	3
	9102	–40	–19	41	73	1
	9102	–30	–21	32	339	3
	9102	–23	–22	27	24	3
	9101	–38	+24	49	533	9
	9101	–28	+21	40	12	2
	9101	–27	+23	40	145	1
	9101	–25	+21	38	194	1
	9103	–36	+ 5	38	48	1
	9100	+56	+ 6	57	48	1
	9097	+83	–13	83	194	2
	(7)	(269)	(–7)		1,828	37
13.625	9108	–69	+10	70	12	1
NO-G	9106	–50	–12	50	48	3
	9107	–32	–17	33	61	9
	9102	–26	–19	27	73	1
	9102	–25	–17	26	121	10
	9102	–17	–20	21	364	8
	9102	–10	–20	17	48	9
	9101	–24	+25	40	582	16
	9101	–13	+22	32	24	10
	9101	–13	+24	34	388	2
	9103	–21	+ 6	25	24	6
	9109	+36	– 8	36	12	3
	9100	+70	+ 5	70	12	1
	(8)	(256)	(–7)		1,769	79
14.694	9108	–56	+ 9	58	12	1
NO-F	9107	–19	–17	22	61	10
	9101	–19	+25	37	24	1
	9101	–11	+25	35	533	10
	9101	–10	+23	32	48	6
	9101	+ 1	+24	31	339	2
	9102	–13	–19	17	73	3
	9102	–12	–17	16	145	11
	9102	– 3	–20	13	291	5
	9111	+19	–12	20	12	1
	(5)	(242)	(–7)		1,538	50

Date U.T. Mar.	Mount Wilson group No.	Heliographic Difference in longitude °	Heliographic Latitude °	Distance from center of disk °	Area of spot or group	Spot count
15.672	9108	−42	+ 9	45	12	1
N O-G	9110	−37	− 8	37	6	1
	9113	−26	+ 7	30	12	3
	9106	−24	−15	25	24	6
	9107	− 6	−17	12	48	10
	9101	− 5	+25	33	12	2
	9101	+ 2	+25	32	436	10
	9101	+ 3	+23	31	73	6
	9101	+13	+24	34	315	3
	9102	− 1	−15	8	97	8
	9102	− 1	−19	12	48	4
	9102	+ 3	−16	10	61	5
	9102	+10	−20	16	291	7
	9111	+33	−12	33	12	2
	9112	+35	+27	48	6	1
	9109	+70	− 8	70	12	1
	(10)	(229)	(−7)		1,465	70
16.637	9108	−29	+ 9	33	12	1
MW-G	9113	−13	+ 7	18	12	2
	9106	−11	−14	13	16	6
	9107	+ 7	−17	12	145	10
	9102	+12	−17	16	48	12
	9102	+12	−19	16	24	3
	9102	+17	−17	20	24	6
	9102	+23	−20	25	291	4
	9101	+15	+26	37	436	10
	9101	+18	+22	34	48	2
	9101	+27	+26	42	121	1
	9101	+29	+24	42	97	1
	9112	+50	+27	59	6	1
	(7)	(216)	(−7)		1,280	59
17.632	(*)	−57	− 4	57	12	5
N O-F	(*)	−10	− 9	10	12	3
	(*)	+ 1	−10	3	24	2
	9107	+20	−17	23	97	6
	9102	+26	−17	27	24	4
	9102	+31	−17	32	12	1
	9102	+38	−20	39	218	4
	9101	+28	+26	43	436	10
	9101	+31	+22	42	36	2
	9101	+39	+26	50	121	1
	9101	+41	+24	51	194	1
	(6)	(203)	(−7)		1,186	39
18.631	(*)	+10	−30	25	12	3
N O-G	9106	+17	−11	17	73	6
	9107	+31	−17	32	73	5
	9102	+37	−18	38	24	6
	9102	+51	−20	51	194	6
	9102	+60	−17	60	36	1
	9102	+63	−18	63	36	1
	9101	+40	+27	52	388	10
	9101	+45	+24	54	291	10
	9101	+51	+26	59	97	1
	9101	+54	+24	62	194	1
	(5)	(190)	(−7)		1,418	50

Date U.T. Mar.	Mount Wilson group No.	Heliographic Difference in longitude °	Heliographic Latitude °	Distance from center of disk °	Area of spot or group	Spot count
19.724	9106	+31	−10	31	24	3
N O-F	9102	+53	−20	53	97	6
	9102	+65	−20	65	291	1
	9102	+66	−23	66	24	1
	9101	+53	+26	60	291	7
	9101	+57	+23	63	388	7
	9101	+66	+24	71	242	1
	9101	+69	+23	72	194	1
	(*)	+75	−19	75	145	3
	(4)	(176)	(−7)		1,696	30
20.644	9114	+40	+16	47	24	4
N O-G	9106	+45	− 9	45	24	5
	9102	+66	−20	66	73	3
	9102	+78	−20	78	242	1
	9102	+80	−20	80	24	1
	9101	+66	+26	71	291	4
	9101	+70	+24	75	242	1
	9101	+80	+25	82	388	1
	(4)	(164)	(−7)		1,308	20
21.692	9118	−78	− 9	78	12	1
N O-G	9116	+48	− 7	48	12	4
	9114	+53	+15	57	16	6
	9106	+59	−10	59	12	1
	9101	+78	+26	81	291	1
	9101	+84	+24	86	194	1
	(5)	(150)	(−7)		537	14
22.612	9118	−66	−10	66	12	4
MW-VG	9116	+62	− 7	62	24	7
	(2)	(138)	(−7)		36	11
23.653	9121	−77	+ 7	78	73	2
MW-P	9118	−52	−10	52	12	4
	9117	+23	− 8	23	12	2
	(3)	(124)	(−7)		97	8
24.732	9122	−75	+16	78	485	2
N O-G	9124	−64	+ 8	66	170	5
	9117	+38	− 8	38	121	6
	(3)	(110)	(−7)		776	13
25.645	9122	−62	+17	67	461	2
N O-F	9122	−55	+15	59	12	1
	9121	−54	+10	57	73	3
	9121	−47	+10	50	73	6
	9117	+52	− 8	52	97	4
	(*)	+55	+15	59	48	3
	(4)	(98)	(−7)		764	19
26.687	9125	−80	−13	80	194	2
N O-F	9122	−48	+17	53	436	1
	9124	−42	−22	43	97	2
	9121	−40	+10	43	121	8
	9121	−33	+10	37	73	9

Date U.T. Mar.	Mount Wilson group No.	Heliographic Difference in longitude °	Heliographic Latitude °	Distance from center of disk °	Area of spot or group	Spot count
	9117	+67	− 8	67	48	3
	(5)	(84)	(−7)		969	25
27.743	9125	−63	−14	65	145	10
NO-G	9126	−60	+17	67	48	8
	9122	−34	+17	42	436	2
	9124	−29	−22	32	48	7
	9121	−26	+10	31	145	7
	9121	−20	+10	27	145	10
	9120	−24	+13	31	24	7
	9128	+42	−19	43	97	6
	9127	+72	−16	73	24	5
	(8)	(70)	(−7)		1,112	62
29.680	9132	−79	−17	79	145	1
NO-G	9132	−69	−16	69	194	1
	9134	−77	+17	80	242	1
	9125	−42	−15	42	170	10
	9125	−27	−14	28	36	2
	9126	−39	+20	47	24	4
	9126	−32	+17	40	48	1
	9131	−24	−13	25	24	2
	9122	− 9	+16	24	339	1
	9121	+ 2	+10	17	242	9
	9121	+ 7	+10	18	97	5
	9120	+ 4	+12	19	24	7
	9128	+67	−20	68	170	2
	(9)	(45)	(−7)		1,755	46
30.648	9134	−71	+16	73	121	2
NO-F	9134	−63	+16	68	291	1
	9132	−65	−17	65	97	2
	9132	−58	−13	58	48	2
	9132	−55	−16	55	291	1
	9133	−57	− 8	57	12	1
	9125	−29	−15	30	97	14
	9125	−15	−15	16	24	3
	9126	−25	+20	37	48	8
	9126	−20	+17	31	48	1
	9131	−10	−12	11	12	1
	9122	+ 4	+16	24	339	1
	9121	+15	+10	22	242	12
	9121	+21	+10	27	170	5
	9130	+15	+20	31	97	8
	9120	+17	+12	26	24	8
	(*)	+50	−17	50	12	1
	9128	+79	−20	79	194	1
	(12)	(32)	(−7)		2,167	72
31.698	9134	−58	+15	61	145	4
NO-F	9134	−49	+16	54	291	2
	9132	−50	−16	50	97	6
	9132	−45	−14	45	97	8
	9132	−40	−15	40	291	7
	9133	−43	− 8	43	12	2
	9125	−11	−15	14	24	3
	9126	−11	+20	29	242	6
	9126	− 5	+17	25	48	2
	9131	+ 4	−12	6	12	1
	9122	+17	+15	28	388	3

Date U.T. Mar.	Mount Wilson group No.	Heliographic Difference in longitude °	Heliographic Latitude °	Distance from center of disk °	Area of spot or group	Spot count
	9130	+25	+22	38	145	7
	9130	+33	+22	43	291	6
	9121	+30	+10	34	145	12
	9121	+36	+10	40	194	15
	(9)	(18)	(−7)		2,422	84
	Mean daily area for 30 days = 1,348					
	Mean 10 g+s for 30 days = 105.4					
April	9135	−60	+17	66	24	2
1.690	9134	−45	+17	52	291	22
NO-VG	9134	−34	+17	42	291	1
	9132	−36	−16	36	242	24
	9132	−31	−13	31	97	14
	9132	−27	−16	28	388	19
	9133	−29	− 8	29	24	3
	9126	+ 2	+22	28	97	3
	9126	+ 3	+18	24	242	14
	9126	+ 7	+17	24	24	4
	9125	+ 3	−15	10	24	9
	9131	+19	−12	20	16	2
	9122	+31	+15	38	339	6
	9130	+40	+22	49	388	26
	9130	+48	+21	56	485	13
	9121	+42	+ 9	45	194	18
	9121	+48	+11	52	12	1
	9121	+50	+10	53	194	8
	(10)	(5)	(−7)		3,372	189
2.757	9135	−47	+17	53	121	7
NO-G	9134	−35	+18	43	12	1
	9134	−31	+17	39	145	4
	9134	−23	+17	33	12	1
	9134	−21	+17	32	291	1
	9132	−21	−16	23	242	15
	9132	−17	−13	19	194	10
	9132	−12	−16	15	485	4
	9133	−16	− 8	16	121	7
	9126	+15	+23	32	97	3
	9126	+16	+19	30	97	7
	9125	+17	−14	19	24	4
	9131	+33	−12	33	12	1
	9122	+44	+15	50	242	2
	9130	+53	+22	61	388	16
	9130	+61	+21	68	533	1
	9121	+59	+ 9	62	388	13
	(10)	(351)	(−6)		3,404	97
3.638	9136	−80	−13	80	145	2
NO-F	9136	−78	−11	78	291	1
	9135	−36	+17	44	121	8
	9135	−33	+17	41	194	11
	9134	−20	+17	31	145	8
	9134	−11	+17	26	48	9
	9134	− 9	+17	25	291	1
	9132	−10	−16	14	242	10
	9132	− 3	−13	8	145	14
	9132	0	−16	10	485	1
	9133	− 7	− 7	6	291	6

Date U.T. Apr.	Mount Wilson group No.	Heliographic Difference in longitude °	Heliographic Latitude °	Heliographic Distance from center of disk °	Area of spot or group	Spot count
	9133	− 1	− 7	1	242	5
	9126	+26	+22	39	73	5
	9126	+27	+20	38	73	7
	9125	+29	−14	30	24	3
	9131	+46	−11	46	48	4
	9122	+55	+15	60	242	2
	9130	+63	+22	70	436	5
	9130	+72	+21	78	679	3
	9121	+71	+10	75	388	4
	(11)	(339)	(−6)		4,603	109
4.698 NO-F	9137	−83	+15	84	97	1
	9138	−74	−15	74	12	1
	9136	−69	−12	69	194	3
	9136	−61	−12	61	206	1
	9135	−23	+17	33	121	8
	9135	−19	+17	30	97	10
	9134	− 6	+17	24	97	8
	9134	+ 3	+17	24	73	7
	9134	+ 4	+17	23	242	1
	9132	+ 3	−16	10	145	7
	9132	+11	−13	13	170	10
	9132	+14	−17	18	485	1
	9133	+ 7	− 8	8	339	1
	9133	+11	− 7	11	97	9
	9133	+14	− 7	14	194	1
	9126	+40	+22	49	97	2
	9125	+44	−15	45	12	1
	9131	+60	−11	60	12	1
	9122	+69	+15	73	194	1
	9121	+80	+ 8	82	97	1
	9130	+82	+23	85	485	3
	(13)	(325)	(−6)		3,466	78
5.667 NO-VG	9140	−80	+23	83	145	1
	9139	−77	− 9	77	73	3
	9137	−70	+15	75	194	1
	9138	−66	−16	67	24	2
	9138	−60	−15	61	12	1
	9136	−56	−12	56	291	7
	9136	−49	−11	49	242	5
	9135	− 8	+17	25	170	15
	9135	− 8	+19	27	12	5
	9134	+ 8	+18	27	48	7
	9134	+16	+15	26	12	2
	9134	+17	+16	28	267	1
	9132	+17	−17	22	145	7
	9132	+23	−16	25	48	8
	9132	+27	−17	29	582	1
	9133	+20	− 8	20	388	1
	9133	+24	− 7	24	145	16
	9133	+29	− 7	29	218	1
	9126	+52	+23	60	24	6
	9125	+57	−15	57	24	7
	9122	+84	+15	86	194	1
	(12)	(312)	(−6)		3,258	98
6.673 NO-G	9139	−68	−12	68	145	8
	9139	−60	− 9	60	48	1
	9140	−66	+23	73	121	1
	9137	−58	+14	62	194	1
	9138	−52	−17	53	48	5
	9136	−43	−13	43	218	8
	9136	−35	−10	35	339	9
	9135	+ 6	+17	25	194	12
	9134	+21	+19	33	24	6
	9134	+30	+16	37	291	1
	9132	+30	−17	32	97	7
	9132	+40	−19	42	582	1
	9133	+32	− 8	32	291	2
	9133	+39	− 7	39	145	10
	9133	+44	− 7	44	218	1
	9126	+63	+25	71	12	1
	9125	+72	−15	72	12	1
	(11)	(299)	(−6)		2,979	75
7.683 MW-F	9143	−75	+ 9	78	73	1
	9141	−68	− 6	68	48	1
	9142	−70	−28	70	24	2
	9139	−54	−12	54	73	6
	9139	−46	−10	46	48	1
	9140	−52	+23	61	97	1
	9137	−44	+14	49	194	1
	9138	−38	−17	40	24	5
	9136	−28	−13	28	145	9
	9136	−21	−10	21	436	7
	9135	+20	+16	30	170	16
	9134	+43	+16	49	339	1
	9132	+44	−17	45	97	4
	9132	+53	−18	54	679	1
	9133	+46	− 8	46	291	1
	9133	+52	− 7	52	97	4
	9133	+57	− 7	57	242	1
	(12)	(286)	(−6)		3,077	62
8.751 NO-F	9144	−72	− 7	72	12	1
	9143	−60	+ 9	63	48	1
	9142	−59	−27	61	24	1
	9141	−56	− 6	56	339	9
	9141	−55	− 8	55	12	1
	9140	−43	+22	52	48	1
	9140	−38	+22	48	121	1
	9139	−40	−11	40	48	5
	9139	−31	− 9	31	24	2
	9137	−30	+14	36	194	1
	9138	−26	−18	28	12	3
	9136	−13	−13	14	73	4
	9136	− 8	−11	10	339	2
	9135	+35	+16	42	194	8
	9134	+57	+16	62	339	1
	9133	+61	− 9	61	291	1
	9133	+73	− 8	73	242	1
	9132	+67	−19	67	533	1
	(13)	(272)	(−6)		2,893	44
9.659 NO-G	9147	−82	−10	82	97	2
	9148	−80	−18	80	48	1
	9148	−78	−19	78	48	2
	9146	−75	− 9	75	48	1
	9144	−57	− 9	57	12	1
	9141	−49	− 5	49	24	4
	9141	−43	− 6	43	267	15

Date U.T. Apr.	Mount Wilson group No.	Heliographic Difference in longitude °	Heliographic Latitude °	Distance from center of disk °	Area of spot or group	Spot count
	9141	−38	− 6	38	194	1
	9143	−48	+ 9	51	48	8
	9142	−46	−27	49	36	3
	9139	−28	−11	28	48	8
	9139	−19	− 9	19	48	4
	9140	−25	+23	39	97	1
	9137	−17	+14	26	194	8
	9138	− 8	−18	15	12	7
	9136	− 1	−14	9	6	3
	9136	+ 5	−12	7	339	10
	9135	+48	+15	54	194	12
	9134	+70	+16	75	339	1
	9133	+72	− 9	72	97	1
	9133	+87	− 9	87	242	1
	9132	+81	−20	81	533	1
	(16)	(260)	(−6)		2,971	95
10.637	9147	−69	−11	69	97	2
NO-F	9147	−60	− 9	60	48	2
	9148	−69	−19	69	145	4
	9144	−45	− 8	45	97	4
	9141	−34	− 6	34	194	8
	9141	−28	− 6	28	291	6
	9139	−17	−11	18	12	1
	9139	− 5	− 9	6	12	1
	(*)	−13	+ 9	20	24	5
	9140	−13	+23	32	61	1
	9137	− 4	+14	21	194	1
	9138	+ 5	−16	12	12	3
	9136	+17	−12	18	388	3
	9135	+61	+16	66	145	7
	(11)	(247)	(−6)		1,720	48
11.729	9150	−78	+10	80	242	4
MW-G	9150	−72	+ 9	74	582	1
	9152	−78	−23	78	194	2
	9147	−54	−11	54	121	4
	9148	−54	−23	55	97	5
	9148	−49	−19	50	97	6
	9146	−44	− 8	44	24	2
	9144	−31	− 8	31	194	8
	9143	−21	+ 8	26	48	4
	9141	−19	− 6	19	194	12
	9141	−13	− 6	13	291	7
	9149	−10	+14	22	194	7
	9140	+ 2	+23	29	61	1
	9139	+ 8	− 9	9	16	1
	9137	+11	+14	23	194	1
	9136	+30	−13	31	339	1
	9135	+78	+16	79	73	2
	(14)	(232)	(−6)		2,961	68
12.674	9153	−68	+19	73	48	1
NO-F	9150	−68	+10	71	242	6
	9150	−60	+ 9	63	873	3
	9152	−64	−23	65	145	3
	9151	−58	− 5	58	12	3
	9147	−41	−11	41	73	3
	9148	−38	−21	40	242	12
	9146	−32	− 8	32	12	2

Date U.T. Apr.	Mount Wilson group No.	Heliographic Difference in longitude °	Heliographic Latitude °	Distance from center of disk °	Area of spot or group	Spot count
	9155	−19	−11	20	48	4
	9144	−18	− 8	18	388	9
	9143	− 8	+ 7	16	48	4
	9141	− 5	− 6	5	48	6
	9141	+ 1	− 6	1	194	5
	9149	+ 2	+15	22	48	11
	9140	+13	+23	32	61	1
	9139	+22	− 8	22	12	2
	9137	+23	+13	30	194	1
	9136	+45	−13	45	339	1
	9154	+55	+11	58	48	6
	(17)	(220)	(−6)		3,075	83
13.601	9153	−56	+19	63	48	15
MW-VG	9150	−54	+10	57	291	29
	9150	−48	+ 9	51	824	1
	9152	−51	−24	53	194	19
	9151	−50	− 7	50	36	13
	9147	−27	−11	27	73	3
	9148	−23	−22	26	218	45
	9155	− 5	−12	8	48	15
	9144	− 5	− 8	6	630	32
	9143	+ 5	+ 7	15	48	13
	9141	+ 8	− 7	8	48	10
	9141	+15	− 6	15	242	13
	9149	+15	+15	26	109	16
	9140	+25	+23	39	61	1
	9139	+35	− 8	35	6	1
	9137	+36	+13	42	182	1
	9156	+52	−18	53	48	15
	9136	+58	−13	58	315	1
	9154	+67	+11	70	109	12
	(17)	(208)	(−6)		3,530	255
14.694	9158	−75	−17	75	24	2
MW-F	9157	−73	+22	78	145	1
	9153	−42	+19	49	61	4
	9150	−38	+10	42	242	8
	9150	−32	+ 9	36	824	1
	9152	−37	−23	40	97	4
	9147	−13	−11	14	97	6
	9148	− 9	−22	18	339	26
	9144	+ 8	− 8	9	533	11
	9155	+10	−11	11	24	3
	9149	+27	+15	34	109	11
	9141	+28	− 6	28	218	6
	9140	+38	+23	48	48	1
	9137	+49	+13	53	182	1
	9156	+69	−18	69	24	1
	9136	+76	−13	76	291	1
	9154	+79	+11	80	73	1
	(16)	(193)	(−6)		3,331	88
15.636	9157	−70	+27	77	97	1
NO-G	9157	−61	+21	68	291	1
	9158	−60	−17	61	61	3
	9153	−28	+19	38	36	5
	9150	−27	+10	32	218	12
	9150	−20	+ 9	25	727	1
	9150	−19	+11	26	24	5
	9152	−24	−23	29	97	9

Date U. T. Apr.	Mount Wilson group No.	Heliographic Difference in longitude °	Heliographic Latitude °	Heliographic Distance from center of disk °	Area of spot or group	Spot count
	9147	− 5	−11	6	6	2
	9147	+ 4	−11	5	48	3
	9148	+ 4	−22	16	388	26
	9144	+21	− 8	21	436	19
	9144	+27	− 7	27	61	1
	9155	+22	−11	23	48	8
	9149	+41	+15	47	48	8
	9141	+43	− 6	43	194	3
	9140	+50	+23	59	48	1
	9137	+61	+13	65	170	1
	9156	+82	−18	82	24	1
	9136	+85	−13	85	242	1
	(15)	(181)	(−6)		3,264	111
16.642	9161	−78	−10	78	218	6
NO-F	9157	−58	+27	64	145	2
	9157	−48	+22	54	267	3
	9158	−47	−18	49	48	5
	9153	−13	+22	29	73	8
	9153	−13	+19	26	48	5
	9150	−12	+11	20	97	7
	9150	− 7	+10	16	73	1
	9152	−11	−23	21	36	3
	9160	− 7	− 5	7	12	3
	9160	− 1	− 2	3	12	2
	9148	+18	−22	23	436	29
	9147	+19	−10	20	12	1
	9159	+30	+17	36	12	2
	9155	+35	−12	36	145	12
	9144	+35	− 8	35	388	19
	9144	+40	− 7	40	61	3
	9141	+57	− 6	57	145	3
	9149	+58	+15	61	24	2
	9140	+64	+24	69	48	3
	9137	+75	+14	77	145	1
	(16)	(167)	(−5)		3,245	120
17.859	9161	−65	− 9	65	97	1
MW-G	9161	−64	−11	64	194	19
	9157	−42	+27	52	145	1
	9157	−33	+22	43	218	2
	9163	−10	+21	27	85	8
	9153	+ 2	+22	26	24	3
	9150	+ 3	+11	15	48	9
	9150	+ 7	+10	16	873	1
	9152	+ 3	−23	18	73	11
	9160	+ 8	− 6	8	24	5
	9160	+10	− 4	10	24	6
	9162	+18	−26	27	61	5
	9148	+33	−22	36	582	40
	9159	+46	+17	51	24	3
	9155	+48	−14	49	145	6
	9144	+49	− 8	49	97	11
	9144	+52	−11	53	436	20
	9144	+55	− 9	55	242	3
	9144	+58	− 7	58	48	4
	9141	+67	−10	67	48	3
	9141	+72	− 6	72	339	8
	(13)	(151)	(−5)		3,827	169
18.583	9161	−53	− 9	53	85	1
MW-VG	9161	−52	−11	52	242	17

Date U. T. Apr.	Mount Wilson group No.	Heliographic Difference in longitude °	Heliographic Latitude °	Heliographic Distance from center of disk °	Area of spot or group	Spot count
	9164	−48	+16	52	12	2
	9157	−32	+27	44	97	1
	9157	−29	+26	42	48	10
	9157	−23	+22	35	194	1
	9163	+ 2	+21	25	109	9
	9150	+13	+11	21	61	8
	9150	+19	+10	24	873	1
	9152	+14	−23	23	48	8
	9162	+30	−27	37	145	11
	9148	+45	−23	48	679	64
	9155	+60	−15	60	145	10
	9144	+60	− 8	60	48	11
	9144	+62	−12	62	582	22
	9144	+67	− 9	67	194	4
	9144	+68	− 6	68	24	5
	9141	+79	− 9	79	48	5
	9141	+84	− 6	84	388	3
	(11)	(142)	(−5)		4,022	193
19.677	9167	−88	+26	88	242	1
NO-G	9167	−86	+24	87	679	1
	9166	−78	+23	79	194	1
	9161	−42	−14	43	24	1
	9161	−38	− 9	38	73	1
	9161	−35	−12	36	97	2
	9164	−33	+16	39	48	8
	9157	−18	+28	38	73	2
	9157	−10	+22	28	194	7
	9165	− 9	−19	17	24	5
	9165	− 5	−17	12	73	3
	9163	+15	+21	29	97	5
	(*)	+18	−28	28	6	2
	9153	+26	+23	38	24	6
	9152	+28	−23	32	36	3
	9150	+32	+10	36	824	3
	9162	+41	−26	45	12	3
	9162	+45	−26	48	61	1
	9148	+55	−24	56	145	12
	9148	+62	−22	63	727	33
	9155	+72	−15	72	194	4
	9144	+78	− 9	78	970	5
	(15)	(127)	(−5)		4.817	109
20.641	9169	−80	+15	82	291	1
NO-F	9167	−75	+23	78	194	2
	9167	−74	+27	77	921	4
	9167	−70	+24	75	485	2
	9166	−64	+23	69	24	4
	9166	−62	+23	67	145	1
	9161	−30	−13	32	24	5
	9161	−25	− 9	25	48	2
	9161	−23	−11	24	97	14
	9164	−19	+16	27	73	6
	9157	− 5	+28	33	97	2
	9157	+ 3	+22	27	242	8
	9165	+ 5	−17	13	97	8
	9163	+28	+21	38	97	8
	9168	+43	+18	49	6	1
	9150	+46	+ 9	48	727	4
	9162	+58	−26	60	73	6
	9148	+75	−24	77	727	7

Date U.T. Apr.	Mount Wilson group No.	Heliographic Difference in longitude °	Heliographic Latitude °	Distance from center of disk °	Area of spot or group	Spot count
	9155	+85	−15	85	194	3
	(13)	(115)	(−5)		4,562	88
21.663	9169	−74	+13	77	97	4
NO-F	9169	−67	+15	70	291	1
	9167	−64	+24	69	194	20
	9167	−58	+23	63	218	4
	9167	−57	+26	64	824	20
	9167	−55	+24	60	582	8
	9166	−47	+22	54	145	4
	9161	−16	−10	17	48	16
	9161	−12	−10	13	145	14
	9161	− 8	−12	11	97	12
	9164	− 5	+16	25	121	15
	9157	+ 8	+27	33	97	4
	9157	+16	+23	33	242	9
	9165	+18	−17	22	145	9
	9163	+41	+21	48	48	6
	9150	+60	+ 9	62	727	2
	9162	+71	−25	72	97	1
	(10)	(101)	(−5)		4,118	149
22.665	9169	−61	+13	65	97	6
NO-F	9169	−53	+15	57	242	4
	9167	−47	+24	54	218	11
	9167	−45	+22	52	194	2
	9167	−44	+26	52	776	18
	9167	−41	+24	50	630	5
	9166	−31	+22	41	121	4
	9171	−15	−11	16	97	9
	9161	− 2	−10	5	48	12
	9161	+ 2	−10	5	194	23
	9161	+ 7	−11	9	145	9
	9164	+ 9	+15	22	242	14
	9157	+21	+27	37	48	6
	9157	+30	+23	41	194	7
	9165	+29	−19	32	242	20
	9163	+55	+20	60	24	5
	9150	+74	+ 9	76	727	2
	(10)	(88)	(−5)		4,239	157
23.635	9174	−85	+12	85	242	1
NO-F	9174	−76	+10	77	48	1
	9169	−48	+13	51	97	1
	9169	−39	+15	44	267	2
	9173	−47	−19	49	24	1
	9167	−35	+24	45	485	10
	9167	−35	+26	46	73	1
	9167	−32	+26	44	461	10
	9167	−28	+24	40	776	4
	9172	−22	−20	26	24	3
	9166	−18	+22	32	97	1
	9171	− 2	−12	7	145	7
	9161	+16	−11	16	194	8
	9161	+22	−11	23	97	4
	9164	+22	+15	29	242	7
	9157	+34	+26	46	24	2
	9157	+44	+22	51	194	2
	9170	+37	+33	51	145	6
	9165	+41	−20	43	194	3
	9165	+45	−18	47	145	4
	(12)	(75)	(−5)		3,974	78
24.697	9176	−80	−16	80	291	3
NO-P	9175	−75	− 6	75	145	1
	9174	−72	+12	74	242	1
	9174	−60	+10	62	97	3
	9169	−34	+13	38	48	6
	9169	−25	+14	32	170	4
	9173	−34	−19	36	16	4
	9167	−23	+25	37	194	8
	9167	−18	+27	36	582	7
	9167	−18	+22	32	194	1
	9167	−15	+24	33	727	9
	9172	−10	−22	20	12	1
	9166	− 4	+23	28	97	3
	9171	+10	−12	12	48	3
	9171	+15	−11	16	97	2
	9161	+29	−11	30	97	7
	9161	+36	−11	36	145	6
	9164	+38	+15	43	97	2
	9170	+50	+33	61	145	2
	9165	+54	−21	56	242	4
	9165	+60	−17	60	73	1
	9157	+58	+23	63	194	1
	(14)	(61)	(−5)		3,953	79
25.605	9177	−80	+17	80	194	1
MW-G	9176	−67	−19	68	388	1
	9175	−62	− 7	62	145	4
	9174	−58	+12	60	242	1
	9174	−48	+10	51	36	4
	9169	−21	+13	28	48	3
	9169	−12	+13	22	170	4
	9173	−21	−20	26	24	8
	9167	−11	+25	32	291	19
	9167	− 7	+22	27	194	1
	9167	− 7	+27	34	727	14
	9167	− 4	+23	28	509	1
	9166	+ 1	+23	28	48	7
	9166	+ 8	+23	29	97	6
	9171	+23	−12	24	48	10
	9171	+28	−12	29	97	1
	9161	+41	−10	41	73	15
	9161	+49	−11	50	194	17
	9164	+50	+16	54	73	8
	9170	+64	+33	71	145	7
	9165	+67	−20	68	242	5
	9165	+74	−17	76	48	1
	9157	+71	+23	74	194	1
	(14)	(49)	(−5)		4,227	139
26.643	9179	−80	+17	82	582	1
NO-G	9177	−68	+18	70	194	1
	9176	−57	−19	58	388	2
	9175	−48	− 7	48	97	5
	9174	−45	+11	48	291	1
	9174	−34	+ 9	36	24	1

Date U.T. Apr.	Mount Wilson group No.	Heliographic Difference in longitude °	Heliographic Latitude °	Distance from center of disk °	Area of spot or group	Spot count
	9178	−37	−27	42	24	4
	9173	− 8	−20	18	24	6
	9169	+ 1	+14	19	170	4
	9169	− 7	+13	19	48	8
	9167	+ 2	+22	27	145	8
	9167	+ 7	+21	26	194	1
	9167	+ 7	+25	31	679	19
	9167	+10	+23	30	436	1
	9166	+15	+23	32	61	6
	9166	+21	+23	35	73	1
	9171	+38	−12	39	73	7
	9161	+55	− 7	55	24	1
	9161	+58	−10	58	97	7
	9165	+80	−21	80	194	3
	9157	+84	+23	86	145	1
	(14)	(35)	(−5)		3,963	88
27.712 NO-G	9179	−66	+17	70	533	1
	9180	−61	−23	62	24	2
	9177	−54	+17	57	194	1
	9181	−49	+17	53	48	2
	9176	−48	−17	50	48	4
	9176	−43	−18	44	485	2
	9175	−34	− 7	34	61	1
	9174	−30	+11	33	291	1
	9174	−20	+ 9	24	24	1
	9178	−24	−27	32	170	9
	9173	+ 3	−23	19	24	2
	9169	+14	+13	22	97	2
	9167	+15	+22	30	121	3
	9167	+20	+20	31	194	1
	9167	+21	+25	35	533	18
	9167	+23	+23	34	485	1
	9166	+30	+23	40	48	6
	9166	+35	+23	44	61	1
	9171	+53	−13	54	48	1
	9171	+60	−13	60	12	2
	9161	+71	−10	71	24	2
	(14)	(21)	(−4)		3,525	63

Date U.T. Apr.	Mount Wilson group No.	Heliographic Difference in longitude °	Heliographic Latitude °	Distance from center of disk °	Area of spot or group	Spot count
29.646 NO-F	9182	−48	−16	50	48	1
	9179	−38	+17	43	436	1
	9177	−28	+17	35	73	1
	9176	−21	−17	24	24	1
	9176	−17	−19	23	388	2
	9181	−20	+17	28	12	1
	9174	− 3	+11	14	291	1
	9175	− 5	− 5	5	12	1
	9178	+ 1	−28	25	61	1
	9178	+ 2	−25	23	12	1
	9178	+ 8	−26	25	73	4
	9167	+41	+23	48	145	3
	9167	+46	+21	51	73	1
	9167	+50	+23	56	436	1
	9167	+50	+25	57	242	3
	9169	+42	+13	45	61	1
	9171	+80	−11	80	48	1
	(11)	(356)	(−4)		2,435	25
30.633 NO-VG	9182	−36	−17	38	73	7
	9179	−25	+17	32	436	1
	9177	−14	+17	25	61	1
	9176	− 9	−20	19	24	7
	9176	− 3	−19	17	388	5
	9181	− 7	+17	22	6	1
	9174	+10	+11	17	242	1
	9178	+13	−28	28	73	1
	9178	+16	−25	26	121	15
	9167	+53	+23	58	121	7
	9167	+59	+21	63	97	1
	9167	+61	+23	65	533	1
	9167	+62	+25	67	97	5
	9169	+55	+12	57	24	5
	(9)	(343)	(−4)		2,296	58

Mean daily area for 29 days = 3,486
Mean 10 g+s for 29 days = 232.9

NAVY-DPPO-PRNC-WASH.D.C.3589